

## Datasheet: MCA421B

**BATCH NUMBER 162085**

<b>Description:</b>	RAT ANTI MOUSE IgG2a HEAVY CHAIN:Biotin
<b>Specificity:</b>	IgG2a HEAVY CHAIN
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	LO-MG2a-7
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.5 mg

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			0.5ug/ml - 1.0ug/ml
Western Blotting			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG conjugated to Biotin - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.1% Sodium Azide 50% Glycerol
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml

**Immunogen** Purified IgG from BALB/c mice.

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**External Database**

**Links**

**UniProt:**

[P01863](#) [Related reagents](#)

[P01865](#) [Related reagents](#)

[P01864](#) [Related reagents](#)

**Entrez Gene:**

[380793](#) Igh-1a [Related reagents](#)

[380793](#) Igh-1a [Related reagents](#)

[380793](#) Igh-1a [Related reagents](#)

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**RRID** AB\_321823

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**Fusion Partners** Spleen cells from immunised LOU/c rats were fused with cells of the rat IR983F myeloma cell line.

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**Specificity** **Rat anti Mouse IgG2a:Biotin, clone LO-MG2a-7** recognizes the gamma 2a heavy chain of mouse immunoglobulin and does not cross-react with other murine immunoglobulin classes or subclasses. Rat anti Mouse IgG2a Heavy Chain antibody, clone LO-MG2a-7 recognizes an allotypic determinant upon mouse IgG2a. It recognizes the IgH1a allotype (as expressed in Balb/c mice), but not the IgH1b allotype (as expressed in C57/BL mice).

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**References**

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2. Bazin, H. *et al.* (1984) Rat monoclonal antibodies. I. Rapid purification from in vitro culture supernatants. [J Immunol Methods. 66 \(2\): 261-9.](#)
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4. Ormstad, H. *et al.* (2000) The fungal cell wall component beta-1,3-glucan has an adjuvant effect on the allergic response to ovalbumin in mice. [J Toxicol Environ Health A. 61: 55-67.](#)
5. Nagao, K. *et al.* (2003) Role of prostaglandin I2 in airway remodeling induced by repeated allergen challenge in mice. [Am J Respir Cell Mol Biol. 29: 314-20.](#)
6. Ormstad, H. *et al.* (2003) The effect of endotoxin on the production of IgE, IgG1 and IgG2a antibodies against the cat allergen Fel d 1 in mice [Toxicology. 188: 309-18.](#)
7. Hall, G. *et al.* (2003) Suppression of allergen reactive Th2 mediated responses and pulmonary eosinophilia by intranasal administration of an immunodominant peptide is linked to IL-10 production. [Vaccine. 21: 549-61.](#)
8. Wolfowicz, C.B. *et al.* (2003) Expression and immunogenicity of the major house dust mite allergen Der p 1 following DNA immunization. [Vaccine. 21: 1195-204.](#)
9. Tan, L.K. *et al.* (2006) Intramuscular immunization with DNA construct containing Der p 2 and signal peptide sequences primed strong IgE production. [Vaccine. 24: 5762-71.](#)
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11. Liedén, A. *et al.* (2009) Cornulin, a marker of late epidermal differentiation, is

down-regulated in eczema. [Allergy. 64:304-11.](#)

12. Hayes, K.S. *et al.* (2017) Chronic *Trichuris muris* infection causes neoplastic change in the intestine and exacerbates tumour formation in APC min/+ mice. [PLoS Negl Trop Dis. 11 \(6\): e0005708.](#)

13. DeGiovanni, C. *et al.* (2019) Cancer Vaccines Co-Targeting HER2/Neu and IGF1R. [Cancers \(Basel\). 11 \(4\) Apr 11 \[Epub ahead of print\].](#)

14. Steel, N. *et al.* (2019) TGF $\beta$ -activation by dendritic cells drives Th17 induction and intestinal contractility and augments the expulsion of the parasite *Trichinella spiralis*. in mice. [PLoS Pathog. 15 \(4\): e1007657.](#)

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**Further Reading**

1. Querinjean, P. *et al.* (1972) Transplantable immunoglobulin-secreting tumours in rats. Purification and chemical characterization of four kappa chains from LOU-Wsl rats. [Eur J Biochem. 31 \(2\): 354-9.](#)

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**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10328 available at: <https://www.bio-rad-antibodies.com/SDS/MCA421B>  
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**Regulatory**

For research purposes only

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